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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/237,646	01/26/1999	VITTORIO CASTELLI	YO998-220	7219

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EXAMINER

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/237,646

Applicant(s)

CASTELLI ET AL.

Examiner

Cam Y T Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 is/are allowed.
- 6) ☒ Claim(s) 1,2,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3-4, 11-12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Applicant filed Appeal Brief on 12/30/03. Appeal conference agreed with the applicant that the Declaration established completion of the invention in the United States at a date prior to the effective date of the Li patent. However, examiner used Liddy et al (UPS 5963940) to reject claims 2 and 10 in the non-final-rejection on 2/13/03 (page #16). Thus, the office action mailed on 7/30/03 has been vacated in view of a new ground of rejection. The office regrets for any inconvenience due to the applicant.

Claims 1-12 are pending in this Office Action.

Applicant discussed that Machihara does not teach first searching a database to retrieve data based on said query and no data retrieved in the steps of a database for the search. However, Machihara teaches that the system displays keywords to a user on an interface. This information indicates that the system has to receive a query before displaying this interface to a user. Thus, on this interface, a user can enter search conditions indicating that he wishes to search for sumo-wrestlers who was born in Tokyo city and display the results in a spreadsheet A format. The searches can be performed in the wrestler table to select a wrestler name Takanohana whose born in prefecture is Tokyo. When the information retrieval section 140 receives the results, they are transferred to the interface section, where they are converted to a format to correspond with the input condition for display format = spreadsheet A and displayed on the user's monitor screen (figs. 7-8, col. 10, lines 5-35). This information shows that the system searches a database to retrieve data based on user's input. The results in a spreadsheet A is presented as retrieved data.

Applicant discussed that Machihara does not receive query refinement input from a user based on user review of presented retrieval results. However, Machihara teaches that the user's request is executed by generating a common request to all such systems, and the search results are displayed in summary table (col. 1, lines 30-40).

Applicant also discussed that Machihara fails to teach database transformation and transformed database searching; accepting user input for query refinement; formatting search results is not the same as transforming a database based on user input. However, Machihara teaches that a user enters search conditions indicating that he wishes to search for sumo-wrestlers who was born in Tokyo city and display the results in a spreadsheet A format. The searches can be performed in the wrestler table to select a wrestler name Takanohana whose born in prefecture is Tokyo. When the information retrieval section 140 receives the results, they are transferred to the interface section, where they are converted to a format to correspond with the input condition for display format = spreadsheet A and displayed on the user's monitor screen. Convert means to transform or to change from one form to another form. Thus, conversion of search results is same as transforming results or database. Also, the above information reads on the claimed limitation transformed database searching; accepting user input for query refinement" (col. 10, lines 5-35).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machihara et al (USP 6233578).

As to claims 1 and 9, Machihara teaches the claimed limitations:

“first searching said database to retrieve data based on said query” as (figs. 7-9, col. 9, lines 30-65); “presenting retrieved data to user” as (figs. 7-9, col. 10, lines 1-20); “receiving user input based on said retrieved data” as (figs. 7-9, col. 9, lines 30-65);

“transforming said database based on said user input to generate a transformed database” as (col. 10, lines 15-20);

“successively searching said transformed database to retrieve data” as (col. 10, lines 15-20). Machihara fails to teach the claimed limitation “repeating step b through e until the results for the said query is satisfied by the user”. However, Machihara teaches after the user enter search request, the system retrieves data items based on user's input and then converts the retrieved data items to a format corresponding with the input condition for display format = spreadsheet A and displays the result to the user (col. 9, lines 30-65; col. 10, lines 1-20). This information implies that it is obvious that the system have to repeat step b through e in order to return to the user a result. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Machihara's teaching of after the user enter

search request, the system retrieves data items based on user's input and then convert the retrieved data items to a format corresponding with the input condition for, finally displays the result to the user. The motivation being to search or retrieve the data from database server and return the result to user's desire efficiency.

5. Claims 2 and 10 are rejected under 35 U.S.C.103(a) as being unpatentable by Machihara in view of Liddy et al (USP 5963940).

As to claims 2 and 10, Machihara teaches substantially the claimed limitation subject matter in claims 1, 9, except the claimed limitation "reformulating the query based on said user input and wherein said searching said transformed database comprises searching said transformed database based on said reformulated query". However, Liddy teaches that accepting queries and reformulating queries based on the subject-contents of the marked documents. The retrieval system allows users to state multiple criteria for retrieving documents and for arranging those retrieval documents. The retrieval system also interacts with the user to formulate a complex representation of the subject contents of a query statements expressed in fully-formed sentences (col. 35, lines 25-35; col. 27, lines 10-25).

It would have been obvious to a person of a person of an ordinary skill in the art at the time the invention was made to apply Liddy's teaching of reformulate query and retrieving documents to Machihara's system. The motivation being to provide a reduction in expensive multimedia query processing.

6. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anand et al (USP 5692181).

As to claims 1 and 9, Anand teaches the claimed limitations:

“first searching said database to retrieve data based on said query” as Smart Report viewing subsystem displays a selected Smart Report on screen, when Smart Report viewing subsystem 53 gets a notification from folder management subsystem 54 to view a Smart Report. If the user decides to drill down from the current Smart Report, Smart Report viewing subsystem 53 notifies the folder management subsystem 54, which handles retrieving Smart Reports, to send a new report request. Smart Reports are stored in a folder. A database is a file composed of records. Thus, this folder is represented as a database. The above information shows that after the user's request by drilling down from the current Smart Report, the system has to search the Smart Reports before displaying the selected Smart Report on screen (col. 8, lines 65-67; col. 9, lines 1-5; col. 6, lines 60-65);

“presenting retrieved data to user” as displaying a selected Smart Report on screen. The selected Smart Report is represented as retrieved data (col. 8, lines 65-67);

“receiving user input based on said retrieved data” as the user can save the viewed Smart Report as a HTML file in either Unicode or ASCII code format. A saved HTML Smart Report can be attached to an e-mail to mail out. This information shows that after receiving user's request saving Smart Report as a HTML file, the system saves Smart Report as a HTML file (col. 9, lines 25-30);

“transforming said database based on said user input to generate a transformed database” as the user can save the viewed Smart Report as a HTML file in either Unicode or

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ASCII code format. A saved HTML Smart Report can be attached to an e-mail to mail out. It means that after the system saves the Smart Report to a HTML file in either Unicode or ASCII code format, the saved HTML Smart Report can be attached to an e-mail to mail out. Saving Smart Report to another format bases on user's request that means as transforming Smart Report (col. 9, lines 25-30);

"successively searching said transformed database to retrieve data" as the user can save the viewed Smart Report as a HTML file in either Unicode or ASCII code format. A saved HTML Smart Report can be attached to an e-mail to mail out. This information shows that the system successively search the saved HTML Smart Report before the system can mail out the saved HTML Smart Report (col. 9, lines 25-30).

Anand does not explicitly teach the claimed limitation "repeating step b through e until the results for the said query is satisfied by the user". However, Anand teaches after Smart Report viewing subsystem 53 gets a notification from folder management subsystem 54 to view a Smart Report, Smart Report viewing subsystem displays a selected Smart Report on screen. The user can save the viewed Smart Report as a HTML file in either Unicode or ASCII code format. A saved HTML Smart Report can be attached to an e-mail to mail out. This information implies that it is obvious to repeat step b through e in order to return to the user a result (col. 8, lines 65-67; col. 9, lines 1-30).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Anand's teaching of after Smart Report viewing subsystem 53 gets a notification from folder management subsystem 54 to view a Smart Report, Smart Report viewing subsystem displays a selected Smart Report on screen. The user can save

the viewed Smart Report as a HTML file in either Unicode or ASCII code format. A saved HTML Smart Report can be attached to an e-mail to mail out in order to search or retrieve the data from database and return the result to user's desire efficiency.

7. Claims 2 and 10 are rejected under 35 U.S.C.103(a) as being unpatentable by Anand in view of Liddy et al (USP 5963940).

As to claims 2 and 10, Anand teaches the claimed limitation subject matter in claims 1, 9, except the claimed limitation "reformulating the query based on said user input and wherein said searching said transformed database comprises searching said transformed database based on said reformulated query".

However, Anand teaches that generating dimensional queries for retrieving data from data warehouse (col. 5, lines 20-21). Liddy teaches that accepting queries and reformulating queries based on the subject-contents of the marked documents. The retrieval system allows users to state multiple criteria for retrieving documents and for arranging those retrieval documents. The retrieval system also interacts with the user to formulate a complex representation of the subject contents of a query statements expressed in fully-formed sentences (col. 35, lines 25-35; col. 27, lines 10-25).

It would have been obvious to a person of a person of an ordinary skill in the art at the time the invention was made to apply Liddy's teaching of reformulate query and retrieving documents to Anand's system in order to provide a reduction in expensive multimedia query processing.

Allowable Subject Matter

8. Claims 3-4 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 3 and 11, none of the available prior art of record teaches or fairly suggest extracting indices from said database and wherein said searching is preceded by retrieving indices to focus said search on indexed information in said database as recited in claim 3 and 11. Index querying service is well known in the art as taught Balogh and Graefe. However, prior art such Balogh and Graefe do not teach "extracting indices from said database and wherein said searching is preceded by retrieving indices to focus said search on indexed information in said data" in the specific combination as recited in claims 3 and 11.

As to claim 4 and 12 are objected because they are dependent on claim 3 and 11.

As claim 5-8 are allowed.

As to claim 5, none of the available prior art of record teaches or fairly suggest at leasta multidimensional indexing engine at said at least.....a similarity query engineretrieved indices from said multidimensional indexing engine for identifying database areas to be search as recited in claim 5. Similarity engine and index generation component are well known in the art as taught by Bach and Graefe. However, prior art such Bach and Graefe do not teach "at leasta multidimensional indexing engine at said at least.....a

similarity query engineretrieved indices from said multidimensional indexing engine for identifying database areas to be search" in the specific combination as recited in claim 5.

As to claim 6-8 are allowed because they are dependent claim 5.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam-Y Truong whose telephone number is (703-605-1169).

The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (703-305-9790). The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Cam-Y Truong

4/8/04


JEAN M. CORRIELUS
PRIMARY EXAMINER